

- 3 the same anchored linear events used for all event data, resulting in dynamic
4 segmentation.

1 12. A method as recited in claim 7, wherein the linear event data comprises
2 an event value; and an anchored linear event related to at least one anchor section, the
3 anchored linear event identifying start and end offsets of an anchor section.

1 13. A method as recited in 12, wherein jurisdictional areas are maintained
2 as spatial data, the method further comprising:
3 storing jurisdictional area polygons in the database;
4 accessing event data for a jurisdictional area using a spatial query;
5 identifying anchor sections contained within a specified jurisdictional area; and
6 compiling event data for the identified anchor sections using a relational query.

1 14. A method as recited in claim 13, further comprising:
2 summarizing anchor section event data using a summary query.

1 15. A method as recited in claim 13, further comprising:
2 summarizing anchor section event data using a report query.

1 16. A method as recited in claim 13, further comprising:
2 pre-processing spatial queries for desired jurisdictional areas; and

3 storing results of the pre-processed spatial queries for desired jurisdictional
4 areas in a location accessible by a query program, resulting in more efficient access to
5 event tables stored by the pre-processing queries.

1 17. A method as recited in claim 7, further comprising:
2 importing road network data in the form of a link-node network by adding
3 additional table columns required to maintain consistency of the link node network
4 with a spatial data engine for the road network data, the adding further comprising:
5 creating an entry in an anchor section table for each link in the imported road
6 network link table;
7 assigning an anchor section identifier (ID) to the entry;
8 copying associated spatial data from the imported data into the spatial data
9 engine road network data; and
10 copying other data associated with the link to define the road network.

1 18. A method as recited in claim 7, further comprising:
2 presenting data as tabular query results and reports.

1 19. A method as recited in claim 7, further comprising:
2 using standard geographic information system (GIS) tools to produce maps
3 using data in the road network.

1 20. A method as recited in claim 7, further comprising:
2 locking data for a desired periods of time while new data is collected.

1 21. A method as recited in claim 7, further comprising:
2 querying data in the road network by a combination of spatial and linear
3 attributes.

1 22. A method as recited in claim 21, wherein the querying further
2 comprises:
3 using one of a spatial query based on a temporary area defined via a map
4 interface or a relational query based on jurisdictional areas; and
5 filtering results of the query based on event data associated with anchor
6 sections in an area of interest as defined by the query.

1 23. A method as recited in claim 21, further comprising:
2 summarizing event values for the associated anchor sections.

1 24. A method as recited in claim 21, further comprising:
2 mapping the associated anchor sections.

1 25. A method as recited in claim 21, wherein the querying launches at least
2 one distributed application to retrieve data from a distributed network of databases.